Notes on some British Scydmaenidae (Col.), with corrections to the List

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In these notes (as in other contributions on similar lines) Kloet & Hincks's *Check List*, 1945, is taken as the basis on which the necessary corrections known to the writer are to be made. These, therefore, are dealt with under the names used in that publication, even if, as in a few cases, a change may since have been indicated in the literature. Again, I take the opportunity to add some remarks on diagnostic points, notable records, or other matters of interest where the occasion arises.

Eutheia Steph.—There appear to be no alterations required in our five species of these uncommon flattish Scydmaenids with truncate elytra; but it may, perhaps, be as well in passing to advert once more to the error found in much of the literature up to the mid-century. This was pointed out in 1950 by Palm and Bergvall (the latter name misprinted Bergyall in my note on the subject, 1953) who showed that it was the males, not the females, that have the antennae longer and less clubbed and the eyes larger—when there is any marked difference. Both Fowler (1889) and Joy (1932) should be amended accordingly.

Three of our species are very scarce. One of these, E. plicata Gyll., has been noted a good many times-mostly singly with ants or by evening sweeping-but Donisthorpe (1927: 40), in giving details of his capture of a specimen in the New Forest, expresses a doubt about many of the British records which I am inclined to share. Possibly some of them really refer to the more seldom recorded but actually less rare E. schaumii Kies; this was the case with Sharp's single exponent of plicata. In the various British collections in the British Museum (Nat. Hist.) all I have seen is the above-mentioned specimen of Donisthorpe's. The late Cmdr. J. J. Walker took the species on several occasions at Cobham Park and Blean Woods, Kent; much of his material seems to have been lost, but there are two from the latter place and one, also by Walker, from the New Forest in the Hope Dept., Oxford. There is a remarkable record of eight examples from cut grass at Yelverton, Devon, by J. H. Keysreference not to hand-which I consider requires confirmation; the conditions rather suggest schaumii. E. plicata is easily recognized on sight by its superior size and the presence of distinct temples behind the eyes.

E. formicetorum Reitt.—A species so little known in this country that any capture is notable. I cannot add to its published localities (New and Windsor Forest; Prattle Wood, Oxon), but can give a few further particulars from Windsor. Donisthorpe took it singly with the ant Lasius brunneus on two occasions, the first in August 1924. In late July 1940 I met with an example in wood-mould from a beech trunk, a few L. niger being present; and in early July 1942 two more, with two E. scydmaenoides Steph., in damp fungoid wood near the foot of an old beech—no ants being seen. The occurrence of the latter species in such a situation is worthy of note, since it is normally found in cut grass, manure, compost or other rotting vegetation. (It is widespread but, in my experience, usually occurs singly; here at Blackheath I have taken it but once, on the wing.)

E. linearis Muls. (=clavata Reitt. (♀), Fowl.).—Another very rare

species in Britain, for long recorded only from Sherwood Forest, where it was taken by Blatch and others of his generation; but not, I believe, for many years past. It is always found under bark, as might be expected from its being the flattest of our species. In May 1934 I captured a female under bark of an oak stump in Windsor Forest, but it has never been found again, despite all the collecting done there. Finally I can add the New Forest as a locality, having detected a single male so labelled in the Champion collection. The late G. H. Ashe believed he had *E. linearis* from Shute Park, S. Devon; the locality, an old deer-park, is a possible one for this forest insect, but an example he submitted to me from there was only scydmaenoides.

Cephennium Müll. & Kunze-Three species of this genus stand on our list. However, Pearce (1957) has pointed out that the common one known here up to then as C. thoracicum M. & K. is not that species but is C. gallicum Gang., and Besuchet (1958: 896) has since shown that our three supposed species must almost certainly be reduced to one, namely gallicum. This I believe to be correct. C. edmondsi Donis. (1931), described from Slapton Ley, Devon, appears to be a slightly smaller form of the latter, with perhaps very minute antennal differences (see Joy, 1932: 622), but scarcely worth even sub-specific status though the form, which lives in fine shingle on the foreshore, seems constant; it is doubtless a local habitat-The aedeagus does not differ from that of gallicum. Edmonds (1931—the name there appears as palllida) was described from the same locality and habitat on two specimens—one of which, the apparent type, I have been able to examine. I can see none of the chraracters of sculpture, etc., alleged to distinguish the 'species', which I believe to be based on nothing more than immaturely-coloured individuals of the edmondsi form of C. gallicum. Dr. Besuchet (l.c.) was of the opinion that if there were really two species of Cephennium in England the second could hardly be other than C. thoracicum; since writing that, he has, I think, seen the type of pallidum. (The 'C. intermedium Aubé' included doubtfully by Fowler (p. 85) on a single specimen from Hampshire in 1859 has, of course, never been confirmed, and was probably an importation or else an extreme variant of C. gallicum.)

Neuraphes rubicundus Schaum.—As far as I can ascertain, this species does not occur in Britain; the insect doing duty for it in our collections is N. talparum Lokay (1921). The latter ranges more widely on the Continent than rubicundus, and unlike it, occurs in Fennoscandia. From what I have seen, it appears safe to assign all records of rubicundus to talparum, while practically all those of N. carinatus also prove referable to it (cf. next paragraph)—not excluding my own for Windsor Forest in 1941 and 1943 (Ent. mon. Mag., 77: 32; 79: 47). The true N. rubicundus (which may, conceivably, yet be found with us) is larger and more elongate, and has a tubercle on each side of the head just internal to the frontal (or strictly, juxta-ocular) foveae, between which the surface is concave or broadly impressed; in talparum this part is convex (with at most a fine short central line) and there is no pair of tubercles between the foveae, which are larger (very large and deep), and the middle of the vertex is raised. The habitat seems rather varied, and is certainly not confined to moles' nests as the name might suggest; the species is widely scattered about England from north to south.

N. carinatus Muls.—Although well distinguished in reality from its

ally talparum (our 'rubicundus'), this species has been much misunderstood in Britain, partly, no doubt, on account of its rarity; but also because its characters have not been adequately stated in our literature, resulting in wide confusion with talparum. Fowler (p. 75) stresses the shorter antennae, but in fact they appear fully as long, if not relatively longer by reason of the smaller slenderer form of carinatus; while both he and That Fowler Joy (p. 480) omit several good and important differences. could not have known the real N. carinatus is proved by his having assigned to it the specimen in Sharp's collection labelled glyptocephalus Saulcy (a nomen nudum), which I have examined and found to be N. talparum. It may be useful to list the chief points in which the present species differs from talparum, on the basis of the few British examples I have inspected (omitting the peculiar male characters of the head and elytra described by Machulka (1931: 80-1), which I have not seen and which may not be developed in our race):-

Slightly smaller and evidently narrower; darker, pitchy-castaneous; antennae thicker (not shorter), very robust, segments 3-10 appreciably more transverse, 7-8 plainly so; segment 3 of maxillary palpi thicker and more swollen; head shorter, only half as long as pronotum, eyes smaller, frontal foveae and post-antennal prominences less marked, vertex without the slight prominence of talparum; pronotum a little more elongate with the keel continued to base and sometimes prolonged forward also; elytra more elongate, outer basal impressions reduced to shallow foveae.

The species appears to be exceedingly rare and local here; it may well be restricted to moss on sheltered chalky hillsides in a few places in the south-east, and is probably thermophilous—being absent from Fennoscandia—and at least to some extent myrmecophilous. Donisthorpe (1927: 77) notes it as having been found with Formica fusca and Lasius brunneus, but does not refer to his capture of it at Box Hill; Machulka (p. 81) gives also mildewed beech-leaves as a habitat. Alleged records for northern counties prove to be only talparum; indeed, it is highly probable that no British records of carinatus up to now are genuine, for the few captures known to me of the true species do not seem to have been published. Of what I regard as the latter I have seen four specimens (all quite alike) representing only two localities: Brasted, Kent (28.vii,22) and Box Hill, Surrey (7.v.22), both in coll. P. Harwood; and two further examples from the latter locality, one in Donisthorpe's collection (30.v.12) and the other in mine (E. A. Waterhouse, ex coll. E. W. Janson). No doubt all four were from the above type of situation. I have, besides, a note of one taken by evening sweeping on the chalk downs at Chipstead, Surrey (27.vii.16), from the late E. C. Bedwell's collecting-diaries; it of course requires checking, but stands a good chance of being correct.

N. longicollis Motsch.—Machulka (pp. 85-6) shows that Motschulsky's description under this name is unrecognizable and in any case can hardly represent the species to which his name has long been applied. That species must therefore take the name praeteritus Rye (1872), as to whose interpretation no doubt exists.

N. planifrons Blatch.—This species, described from Sherwood Forest in 1890, was in fact recognized as long ago as 1931 by Machulka (p. 87) as identical with N. plicicollis Reitt. (1879), but his paper has been overlooked by British coleopterists. The species is a distinctive one and there can be no doubt that Machulka's view is correct, and that Blatch's name must fall as a synonym. Fowler, naturally, was unacquainted with the

insect when he wrote vol. 3 of his magnum opus, but it is of interest to note that he had examined a specimen in the Sharp collection labelled 'S. sharpi de Saulcy' (p. 75) and referred it to rubicundus. I find, however, that it is a typical plicicollis; Fowler must have overlooked the absence of frontal foveae. According to Machulka (l.c.), mature individuals of this species have dark elytra, but most of our British examples appear unicolorous red-brown or rufous, like talparum or sparshalli. worthy features are the broad flat smooth and shining head, relatively strongly clubbed antennae and strikingly long raised hairs on the elytra. Apart from the very different head, the general resemblance is rather to talparum than to sparshalli or helvolus and I have found it mixed with the former in collections at least as often as with either of the latter, and occasionally even 'masquerading' as carinatus. In fact, it is a Neuraphes s. str., not a Scydmoraphes like those which follow (or if, with Machulka, one adopts a more analytical view, a Neuraphes sg. Pararaphes). plicicollis is proving somewhat widespread in England, but is very scarce as a rule. Its capture in numbers in sphagnum moss at Easthampstead, Berks. (E. M. Eustace) is remarkable for a mainly subcortical and rottenwood species.

N. minutus Chaud.—We have here a situation parallel to that between N. rubicundus and talparum; the insect regarded in this country as minutus Chaud. (formerly sparshalli v. minutus) turns out to be an allied but different species, helvolus Schaum-much mixed in collections with sparshalli Denny, to which it is very close. Chaudoir's species, it would seem, has not yet been taken in Britain; should it occur, it may be known by its very small size and very distinctly, even strongly, punctured head. Our descriptions and key-characters seem to be based largely, or at any rate partly, on the true minutus and this has naturally caused confusion. Helvolus is constantly smaller than sparshalli and tends to be darker; the antennae less elongate, penultimate joints more transverse, the last markedly shorter, almost as broad as long; the head flatter, rather more with large shallow punctures, shining, post-antennal prominences feeble, forehead between them flatly convex, without any median impression. In sparshalli the head is less plainly narrowed forwards, more convex and duller behind, the prominences marked, the and nearly space between distinctly concave, smooth Normally these differences are clear, but there are cases where very careful comparison or adjustment of the light-source is needed before they can be appreciated.

N. helvolus will most likely prove as widespread as sparshalli with us; in some collections, indeed, it is the only one of the two represented. At present, such is the confusion between them that nothing useful can be said of their relative distributions. Sparshalli appears to be more often taken singly, whereas helvolus has occurred quite freely in one or two places—as at Littlington, Cambs. (Power) and Sharpenhoe, Beds. (Harwood). Whilst all British records of minutus probably refer to helvolus, those of sparshalli (far more numerous, of course) must nearly all be ambiguous until checked. Power's records, however, for the latter—Highgate, Wanstead, Birdbrook, Lee, Claygate, Woking (Fowler, p. 76)—are correct, as I have satisfied myself from his collection.

N. nigrescens Reitt.—This name figures in our list on the strength of Donisthorpe's record (1913) of two specimens from sedge-stack refuse at

Wicken Fen. It must, however, be deleted, for these specimens are nothing more than rather dark *N. helvolus*, scarcely different from others standing over the labels *sparshalli* and *minutus* in the same collection. Indeed, Reitter's insect is no longer considered a good species, but merely a pitchy-black form of *helvolus* (Machulka, p. 88). Even if the 'ab.' were worth retaining, which is not so since it grades into the ordinary form. Donisthorpe's examples would hardly qualify for it.

Stenichnus harwoodianus Will. and S. barnevillei Reitt.—These names must be removed from our list as separate species, Dr Claude Besuchet having established that both are identical with S. poweri Fowler. matter has been fully dealt with in a recent paper by Mr C. MacKechnie Jarvis (1966) so that only a few brief comments need be made here. S. poweri (a species I have never met with) seems rather more variable in some of its minor characters than has been realised in the past; and I have long thought that harwoodianus at least was somewhat poorly distinguished, notwithstanding the care taken over it by Williams (1927). In the Harwood collection at Oxford will be found further material of this 'species' (topotypical), appearing in no way different from the poweri series next to it (same locality). S. harwoodianus has for some time been included in the Danish fauna, but I have little doubt that the species is really poweri, which seems not to be well known on the Continent. to S. barnevillei, believed synonymous with the latter even by its author (but not by Joy, as Jarvis points out): if there are small infraspecific differences from typical poweri in the Scillonian race on which the name was introduced into our list-and even that seems doubtful-they may well be a result of the isolated and specialised habitat.

S. stotti Donis.—According to Besuchet this is synonymous with S. pusillus M. & K. (see Jarvis, l.c.), and he has so labelled the type and paratypes in the British Museum. The error arose from Donisthorpe's having ascribed the characters of S. scutellaris M. & K. to pusillus, whereby he was left with the true pusillus (not previously distinguished in Britain) as a seemingly new species which he described as above (1932). The mistakes did not really originate with Donisthorpe, however, for the pusillus of all our collections and literature is obviously scutellaris-one has only to consider the male front femoral character—and not 'stotti'. The scutellaris of British authors is, of course, the same species; it is usually found that females are placed as scutellaris and males as pusillus. The latter species (=stotti) is well characterized in the male by having the outer edge of the anterior femora angularly excised (in scutellaris straightly truncate), but Müller and Kunze's figure of this (1822, pl. 5, fig. 15a) hardly appears correct, having no excision and so being more like that of scutellaris. (It is no wonder therefore that Donisthorpe, who refers to this figure in his article, was led astray-though admittedly all else indicates that his species is the German authors' pusillus.) females, there are other differences from scutellaris that will permit separation, notably the slenderer form and longer, darker limbs. species appears so far to be rare and restricted in its British range, and most of our specimens come from moss on the North Downs about Reigate; other records are for Middlesex, Kent, and Sussex.

S. exilis Er.—This species has in recent years been equated on the Continent with Scydmaenus bicolor Denny (1825), which trivial name,

having priority, must be substituted for exilus in our list.

(Euconnus rutilipennis M. & K.—In 1955 I drew attention to the existence of a specimen of this distinctive species, not otherwise known from Britain, in the National Collection, labelled 'B.M.Coll./Swansea'. I have since come across an early note on the insect by Rye (1869), who says that Crotch had little doubt that it was sent to Leach by his (German) correspondent, Herr G. Kunze, but that no reasons were given for the opinion. Rye tells us also that Dr Leach included the species in his MS. catalogue as a Swansea insect. In favour of this last, and against Crotch's belief, is the surely telling fact that Müller and Kunze (1822) mention the species as from 'England' as well as Germany, clearly (?) in allusion to the Swansea capture and on Leach's authority. I am thus inclined to regard this example as genuine, but as a probable introduction via the docks; if such a striking little beetle were really British, others would most likely have been detected by this time.)

Euconnus claviger M. & K.—The species added to our fauna under this name by Donisthorpe (1926)—one of his celebrated Windsor Forest discoveries-still bears it in the 1945 Check List, although the above author had in his 'Windsor List' (1939) emended the name to pragensis Mach. (1923); a correction of identity and not of name alone, the two species being quite distinct. As no separate note was published (that I am aware of) pointing out the change, it has doubtless been largely overlooked. Its propriety is shown by Dr Machulka's having labelled as his E. pragensis the Donisthorpe specimen that represents the species in the National Collection; moreover it is required by the characters of our insect. curious that this apparently little-known and mainly east-mid European species should exist here (where it is certainly of ancient origin), rather than E. claviger which on the Continent occurs much nearer to us-in Denmark, for instance. Both species live with ants: pragensis mostly with Lasius brunneus, claviger more with Formica rufa. The two beetles are much alike, differing in a number of details of which the most obvious, perhaps, is the nature of the long conspicuous lateral hair of the temples and pronotum (the former especially); this in claviger is dark, straight, bristly and stiff, but in pragensis pale (more or less golden), curled, soft The type of the latter, and a claviger with a Machulka and 'frizzed'. label, are in the British Museum. There is a quite good coloured figure of pragensis (as claviger) in Ent. mon. Mag., 66 (1930), plate D, fig. 3; but it shows the antennal club shorter than the funicle, whereas it should be longer than the latter and of much looser form. This insect has scarcely been met with here since the original find of 9 examples in a large L. brunneus nest in the centre of a felled oak (x.26); except once, I believe, by the late E. M. Eustace in the same locality. My specimen, taken by him, bears the date 28.viii.40.

E. murielae Last (1945).—There is little further to note concerning this very distinct, rare, and interesting species, only known at present from Surrey, Kent, and S. Lancs. (see Ent. mon. Mag., 81: 275; 85: 101; 88: 153; 90: 185; 102: 4), except that further examples have been taken in recent years in the Higham (Kent) locality by Mr S. A. Williams, the late Dr Massee, and perhaps others; and to emphasise its total distinctness from its nearest ally (at least in Britain), E. maeklini. To the very marked differences mentioned by Mr Last, one might add the longer, much more conical pronotum quite lacking the basal furrow and foveae of maeklini.

The description of the body-colour as 'reddish-yellow' seems far too light; for all practical purposes the body is blackish or pitchy. From the situations in which the recorded captures have been made I have little doubt that (as suggested in a previous note) the true biotope of *murielae* is subterranean. The species, it seems, is still not known from the continent.

E. maeklini Mann.—Our rarest undoubted Scydmaenid, of which only three British specimens are known to me: Bradfield, Berks. (Joy; see Fowler & Donisthorpe, p. 96); St. Albans, 15.vi.30 (B. S. Williams, Ent. mon. Mag., 66: 221, and see note on p. 219; now in coll. P. Harwood); and near Oxford, 19.vi.16 (Walker, 1916). I have been able to examine these, and it seems that all three are males. At first sight they do not accord very well with a Danish specimen I possess, in which the antennal club appears smaller and much more compact and the whole antennae, like the legs, shorter. I have seen no mention of sexual differences in maeklini, yet they must. I think, be held to account for the above discrepancies—the Danish insect being doubtless a female, which sex has not yet been observed in Britain. Walker's specimen, as stated in his note, had been determined as a male by Champion. The Bradfield one, in poor condition, is in the National (Power) Collection. E. maeklini is regarded by Continental authors as myrmecophilous, occurring chiefly with F. rufa, but also with L. brunneus. Hitherto, however, it has not been found with ants in Britain, our few captures having been at large—on the wing or by evening sweeping—except Joy's 'probably' in dead leaves. In our fauna, the species is at once known by the following features in conjunction: small size, short antennae with broad and very abrupt club, pronotum rounded-obcordate (not conical) with basal channel, elytra subdepressed in front and not thickly haired (cf. E. murielae).

E. nanus Schaum.—Fowler (p. 79) remarked that this very minute species 'certainly appears to be generically different'; and in fact that view is to-day universally adopted and nanus now forms the type of Croissandeau's genus Microscydmus—a change that should be followed in our list. It is excessively local with us, being for long only known from the Scarborough district as one of the series of rarities discovered there by Lawson and Wilkinson during the last century; more recent records are Bradfield, Berks. (Joy), Sherwood Forest (Bedwell), and, in Scotland, Ayr Gorge (Crowson). It seems to be found only in rotten wood and under bark. In its localization M. nanus closely parallels another of the aforesaid Scarborough discoveries, the Pselaphid Trimium brevicorne Rchb.

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63 Blackheath Park, London, S.E.3. 28.vi.69.

On a new Genus of Dermaptera from India

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Family : LABIOIDEA

Sub-family : CARCINOPHORIDAE Super-family : CARCINOPHORINAE

Aborolabis gen. n.

Paralabis Burr (partim), 1915, J. R. mirc. Soc., 1915, p. 540.

Generic Description. d: Size medium, surface pilose. Head triangular, sutures distinct, caudal margin sinuate mesad. Antennae 16segmented(?), 1st segment equal to the combined length of 2nd, 3rd and 4th segments; 2nd small; 3rd long; 4th about half as long as 3rd and equal to 5th; rest long and cylindrical. Eyes smaller than genae. Pronotum quadrate, anterior margin and sides straight, gently widened posteriorly with posterior margin truncate or briefly rounded, median suture distinct. Meso-sternum rounded and meta-sternum truncate posteriorly. Tegmina absent or present as narrow lateral, ovate flaps on mesonotum. Wings absent. Legs with femora and tibiae banded with black, 1st tarsal segment almost as long as 2nd and 3rd segments together.